From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)

(PCT Rules 44bis.3(c) and 72.2)

SONN & PAR Riemergasse A-1010 Wien AUTRICHE	NERINGELANGT 4. 0KT. 2006
	FRIST:

Date of mailing (day/month/year)
28 September 2006 (28.09.2006)

Applicant's or agent's file reference
R 44449

International application No.
PCT/AT2004/000364

Applicant

FRONIUS INTERNATIONAL GMBH et al

1.	Transmittal	of the	translation	to	the a	pplicant
----	-------------	--------	-------------	----	-------	----------

_	The Face of the second
i	The International Bureau transmits herewith a copy of the English translation of the international preliminary report on
	patentability (Chapter 1).

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

KR

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Yolaine Cussac

Facsimile No. +41 22 338 82 70

Facsimile No. +41 22 338 82 70

PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference R 44449	FOR FURTHER ACTION	See Form PCT/IPEA/416				
International application No.						
PCT/AT2004/000364	International filing date (day/month/year)	Priority date (day/month/year) 23.10.2003				
International Patent Classification (IPC)		23.10.2003				
B23K9/12	or manoual classification and ire					
Applicant FRONIUS INTERNATIO	ONAL GMBH					
under Article 35 and transmitte	d to the applicant according to Article 36.	this International Preliminary Examining Authority				
2. This REPORT consists of a total	al of sheets, inc	cluding this cover sheet.				
 This report is also accompanied 	by ANNEXES, comprising:					
a. (sent to the applican	nt and to the International Bureau) a total of	sheets, as follows:				
		peen amended and are the basis for this report and/or ee Rule 70.16 and Section 607 of the Administrative				
the disclosure	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental					
Вох.						
b (sent to the Internat	ional Bureau only) a total of (indicate type and n	umber of electronic carrier(s))				
	, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).					
4. This report contains indications	· · · · · · · · · · · · · · · · · · ·					
⊠						
	of the report					
Box No. II Priorit	у					
Box No. III Non-e	stablishment of opinion with regard to novelty, in	nventive step and industrial applicability				
Box No. IV Lack o	of unity of invention					
	ned statement under Article 35(2) with regard to ns and explanations supporting such statement	novelty, inventive step or industrial applicability;				
Box No. VI Certain	n documents cited					
Box No. VII Certain	n defects in the international application					
Box No. VIII Certain	n observations on the international application					
Date of submission of the demand	Date of completion	of this report				
Name and mailing address of the IPEA/EF	Authorized officer					
	, annual of the control of the contr					
Sacsimile No.	Talaska a Ma					

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AT2004/000364

Box No. I	Basis of the report				
With regar indicated u	ard to the language, this report is based on the internation under this item.	nal application in the language in which it was filed, unless otherwise			
This whic	This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of: international search (Rule 12.3 and 23.1(b))				
l H	publication of the international application (Rule 12.4)				
2 With regar	international preliminary examination (Rule 55.2 and/o				
2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnis receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not a this report):					
	nternational application as originally filed/furnished				
	description:				
pages		as originally filed/furnished			
pages					
pages	s*	received by this Authority on			
∐∆ the cl	laims:	·			
nos.	1-20	as originally filed/furnished			
nos.#	h	as amended (together with any statement) under Article 19			
nos.*		received by this Authority on			
nos.#		received by this Authority on			
the dr	rawings:				
sheets	s <u>1/5-5/5</u>	as originally filed/furnished			
sheets	s*	received by this Authority on			
sheets	s*				
a sequ	uence listing and/or any related table(s) - see Supplemen	ntal Box Relating to Sequence Listing.			
	amendments have resulted in the cancellation of:	·			
	the description, pages				
	the drawings, sheets/figs				
	the sequence listing (specify):				
	any table(s) related to sequence listing (specify):				
they ha	report has been established as if (some of) the amendmentage been considered to go beyond the disclosure as filed	ents annexed to this report and listed below had not been made, sinc d, as indicated in the Supplemental Box (Rule 70.2(c)).			
(the description, pages				
	the claims, nos.				
	the drawings. sheets/figs				
1-1					
	any table(s) related to sequence listing (specify):				
	olies. some or all of those sheets may be marked "supers	seded."			

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/AT2004/000364

			ement under Article 35(2) with regard to novelty, inventive step or Industrial applicability; explanations supporting such statement		
1.	Statement				
	Novelty ((N)	Claims	1-20	YES
			Claims		NO
	Inventive	step (IS)	Claims	1-20	YES
			Claims		NO
	Industrial	applicability (IA)	Claims	1-20	YES
			Claims		NO

2. Citations and explanations (Rule 70.7)

This report makes reference to the following document:

D1: US-A-4 533 817

D1 is regarded as the prior art closest to the subject matter of claim 1. It discloses a method according to the preamble of claim 1.

The subject matter of claim 1 differs from the known method in that during the welding process, at least one mechanical adjustment process is carried out in order to determine the position of the welding wire, the welding wire being used as a sensor.

Therefore, the subject matter of claim 1 is novel (PCT Article 33(2)).

The problem to be solved by the present application can be regarded as that of determining the position of the welding wire in a manner that is more precise than when the current and voltage values are measured.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/AT2004/000364

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The solution to this problem as proposed in claim 1 of the present application involves an inventive step (PCT Article 33(3)) for the following reasons:

The prior art contains nothing that suggests using the welding wire as a mechanical sensor during the welding process.

Claims 2-20 are dependent on claim 1 and therefore likewise meet the PCT requirements for novelty and inventive step.